Research budget were made by the Executive Management Committee of which I was a member. I had one of six to eight votes. Many research programs were instituted not because they promised a worthwhile drug, but because they promised profit. Molecular manipulation came into its own during my time in the industry, In my opinion about 20 to 25% of the total Research and Development budget was spent on worthwhile projects.

The actual dollar figures given by drug companies for "Research and Development" are probably accurate, but the term Research and Development covers a

multitude of sins.

Question. What kind of doctors did you get to perform your clinical investigations? Did you have any experiences with so-called "proof" mills? (Can you

name any?)

Answer. As I indicated in my prepared statement the drug industry doctor must rub shoulders not only with the giants of medicine, but also with its dregs. I doubt that by experience was different from that of others who serve or served the same function. Since the uninspired concoctions outnumber the worthwhile drugs by at least 10 to 1 most of the contact is with a rather shabby lot. I would prefer to name no names. I did work with proof mills, but again I would prefer not to name them.

When one views the scene from inside the drug industry he witnesses strange occurrences. I remember clearly an occasion when we were making preliminary studies of a drug that was being produced in very small quantities by a laboratory operation. We sent a highly placed authority enough of the drug to treat two patients and were somewhat puzzled by the fact that he sent us favorable data on three patients. When, shortly thereafter, he sent us laboratory data containing an item dated one day after the post mark on the letter, we black-listed him. To put the incident in its proper context I must confess that black-listing him consisted of taking his name out of the file of reliable investigators who could serve as adequate guides to important decisions. His card was transferred to another file that indicated that he could be used as a proof-mill when and if we should have need for one. It was one of the most obvious illustrations of what the FDA has called "graphite data" (i.e. data derived from a pencil rather than from laboratory studies) that came to my attention. We did not report it to the FDA and the secret was kept "within the family". To the best of my knowledge, it

Question. Precisely what functions does a drug firm's medical director perform in determining what should or should not be said in advertising? (If the medical

director doesn't have this responsibility, then who does?)

Answer. About four years ago I prepared an essay entitled *The Good Life of a Drug Company Doctor*. It was intended for publication in a lay magazine and in it I tried to give a distillate of my experience, in non-technical language, giving an account of both the advantages and disadvantages of such a career. In it I pointed out the doctor's function in the "review" and "approval" of ad-

vertising copy as one of the disadvantages.

"Drug companies boast that all advertising copy is reviewed or approved by the medical staff. Most require approval since review is pointless if the doctor has no voice in determining what is and what is not acceptable. This poses problems for the doctor. In the first place all advertising copy makes a mountain of paper, some of which is difficult to digest. Over-all the task is dull and boring. In addition, the doctor who does not approve the majority of copy that reaches his desk is not likely to keep his job. Yet over and again he is faced with advertising that is obviously misleading and which he cannot approve in good conscience. The dilemma is best resolved by a bizarre process of reasoning.

"Drug advertisements are never simple expositary statements; they are works of art. The artist who puts a house in his landscape does not have to draw in every brick of the wall or every shingle on the roof. A line here and there, proper shading and texture, and the mere suggestion of totality usually suffice. The eye and the mind of the viewer fill in the gaps in a manner that is predictable and therefore can be manipulated. A drug advertisement is a total composition subject to the same rules. It allows considerable latitude in creating ambiguities. This, too, constitutes an obvious objection to a compendium since it would not

permit this latitude.

"The doctor who reviews advertising copy must learn to ask himself not whether the advertisement is misleading, but rather whether it can pass. An over-simplified illustration of what can and what cannot pass is furnished by a well known optical illusion. Two lines, exactly equal in length, can be made to